

**White Paper**  
**on**  
**The Commercial Asset Visibility (CAV) Program**  
**As of 1 September 1999**

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**Background**

The Commercial Asset Visibility (CAV) Program monitors and tracks progress of reparable assets and provides visibility of these assets flowing through the repair cycle at commercial vendors. The original CAV application was developed by the Ships Parts Control Center at Mechanicsburg, PA in 1988 to provide the Item Managers (IMs) with visibility of their commercially repaired assets and give them critical repair data for these parts. This information allowed them to make informed decisions on procurements and repair forecasts. In July 1992, the Navy's Fleet Material Support Office (FMSO) assumed responsibility for CAV software code development and maintenance. Five months later, CAV was selected by Office of the Secretary of Defense (OSD) as an interim system solution until the Department of Defense (DoD) CAV program could be incorporated for all Components as part of the Materiel Management System (MMS) deployment. The Navy's Aviation Support Office (ASO) and the Army's Aviation and Troop Command (ATCOM) began using CAV to track reparables at their repair vendors in 1992. However, in November 1996 the plans to field DoD CAV were postponed and the Joint Logistics Systems Center (JLSC) assumed program management responsibility for CAV as an independent program. On 24 August 1998, following the JLSC stand down, the Naval Supply Systems Command (NAVSUP) became the CAV DoD Program Manager.

The CAV Program has two distinct pieces; a DoD piece that is used by all contractors, regardless of Service, and a Service specific piece that is maintained by each Service. The Service specific piece interfaces the DoD piece to each Service's Logistics legacy system. FMSO is the Navy's Central Design (CDA) and is responsible for the development and maintenance of DoD CAV as well as the Navy interface. The Army's Logistics Systems Support Center (LSSC) functions as the Army's CDA and develops and maintains the Army interface. The Marine Corps interfaces are supported by the Computer Sciences Corporation

(SCS). All deployed DoD CAV versions and the related mainframe interface programs are Year 2000 (Y2K) compliant.

CAV software has undergone and continues to undergo a series of major technical and functional upgrades. The DoD CAV software is transitioning from a Microsoft Disk Operating System (DOS) Personal Computer (PC) based application (V1.08C1) to a Web-based Windows operating environment. The first Web-based version (V1.10) was released by FMSO in December 1998 and was installed at two Navy vendor sites in July 1999. On a daily basis, data is extracted from each Service's centralized Oracle database and transferred to the respective Service legacy system: Navy's Uniform Inventory Control Program, the Army's Commodity Command Standard System (CCSS) and, in the near future, the Marine Corps Stock Control System (SCS).

NAVICP-M has continued to deploy CAV since it's inception in 1988. NAVICP-P began to deploy CAV V1.06 in 1994. The Army, after initially activating ten vendors in 1992 and 1993, experienced data transfer problems that were traced to the CAV/CCSS interface. They deactivated eight of the ten reporting vendors and ceased CAV deployments until the interface problems were resolved. In January 1998, (LSSC) and Aviation and Missile Command (AMCOM) successfully completed the CAV/CCSS interface testing and have again begun activating CAV vendors.

Since its inception, CAV has been deployed to 259 contractor repair sites and it is currently installed at 223 Navy and Army vendor facilities. Corporate mergers and contract completions account for the variation in the number of repair sites.

## **Discussion**

CAV is a sustainment project that is undergoing a series of major technical upgrades to enhance system performance and usability. The transition to a Web-based operating environment improves the supportability of the software and allows FMSO to enhance the system's performance using the latest software products. This modernizes the CAV software, enhances the user friendliness of the system, provides additional system capabilities, and ensures Y2K compliance. FMSO created a data conversion program for the historical CAV repair data that converts the DOS based data to the Oracle database. Software implementations are accomplished quickly through a server upgrade rather than a labor-intensive upgrade of each vendor's PC. With centralized upgrades, the changes appear on all the contractor PCs the next time they log-on. In addition, an on-

line help menu is available to walk contractors through the use of the system.

Version 2.0 is scheduled for release in September 1999. This version includes mini stock point requisitioning capabilities, allowing for requisitions and related transactions to be received by a contractor and processed in CAV. These transactions are transferred to the Components' DoD CAV application server for upload into the Oracle relational database. Related status transactions are created in DoD CAV and are transferred to the Components' mainframe programs for appropriate routing and logistic measurements.

NAVICP-M's V1.10 vendors will be transitioned to V2.0 in September 1999. Also in September 1999, NAVICP-P will begin to transition their 53 Commercial Aviation Material Management System (CAMMS) sites to V2.0. NAVICP-P expects to complete the CAMMS to CAV conversion by the end of calendar year 2000.

The Army currently has V1.08C1 deployed, and as a result has identified a significant number of assets that were not reflected in the CCSS inventories. All of their current sites will be retrofitted to Version 2.0 beginning in December 1999.

The Marine Corps has been actively marketing CAV to their repair vendors. They have identified a series of potential customers and they will begin deploying Version 2.0 to Raytheon-Dallas in November 1999.

Version 3.0 will provide full two-way requisitioning capability allowing CAV sites to create requisitions and related transactions for Government Furnished Material (GFM). These transactions will be transferred to the Components' mainframe programs for Material Control Activity (MCA) approval. Related status transactions will be file transferred to the DoD CAV application server for upload into the Components' Oracle relational database.

Another major software upgrade that CAV will implement is CAV/EDI V1.0, incorporating Electronic Commerce/Electronic Data Interchange (EC/EDI) capability. This will allow the vendors to enter the repair data one time to populate several databases. It will eliminate duplicate data entries, reduce the data entry requirements, and reduce the number of errors. In addition, it will allow the contractor's mainframe data inputs to be subjected to CAV system edits and validations, ensuring a high level of inventory accountability and accuracy.

The incorporation of EC/EDI information has a secondary benefit to the Government and contractors in that the repair data can be forwarded to the Defense Accounting and Finance Service (DFAS) to expedite payment to the vendor. This change in procedure will avoid millions of dollars in interest payments through prompt payments to the repair vendor.

The Program Management Office (PMO) has already initiated an effort with the Logistics Management Institute (LMI) to accomplish EC/EDI data mapping with selected contractor's mainframes. This proactive approach to the incorporation of EC/EDI data into the CAV system earned the CAV program a \$200,000 grant under the Defense Reform Initiative Directive (DRID) #48. The CAV team is in the process of accomplishing the data mapping of several major defense contractors' computer systems to determine what the "Standard" EC/EDI input should contain. This effort will translate directly to the Direct Vendor Delivery (DVD) initiatives underway in the Navy as well as DFAS vendor pay streamlining efforts.

The Naval Inventory Control Points at Mechanicsburg and Philadelphia (NAVICP-M&P) currently have 207 active vendors, of which 19 were implemented in 1999. The Army Materiel Command (AMC) has three MSCs that are using and deploying CAV to their commercial repair vendors and by the end of FY00 they are planning to have five MSCs using and deploying CAV. The Army currently has 16 active sites.

During the last year, NAVSUP has undertaken a series of initiatives to improve the processing and accountability of repairable assets at the vendors' plants. The PMO has sponsored two initiatives to resolve the mis-directed shipments of assets to commercial repair facilities and to expedite the movement of assets through the commercial repair cycle. In one instance, approximately \$3M worth of repairable assets was located during a CAV activation. The CAV team followed-up on these assets until the IMs issued orders to redirect the assets to the correct repair sites. In another instance, approximately 12,000 assets were redirected to new repair sites after they were identified during a review of the Repair Cycle Time statistics reported in CAV.